

Alternate Vessel Classification Scheme

Class	Description
1	Large Response Vessels Class 1 vessels are large, deep draft, steel hull vessels generally longer than 150 ft. and over 1,500 HP. These vessels are capable of providing all offshore services required during a response, i.e.: major skimming systems, berthing, command vessel hauling cargo, etc. They generally have large open rear decks and elevated wheelhouses and are USCG inspected. They can be used in any offshore region. These vessels may be able to provide limited support services to other vessels in the fleet, i.e.: berthing, meals fuel, water, repair, etc. They are not restricted by seasonal or most sea ice constraints.
1a	Escort Response Vessels (ERVs) These vessels are designed for oil spill prevention and response. These vessels are fitted and manned to carry out extended offshore operations. ERVs have the capacity to mobilize spill response equipment to the spill site. They differ from other Class 1 vessels in that they have oil spill response equipment and trained spill responders onboard at all times.
2	Medium Response Vessels Class 2 vessels are slightly smaller than Class 1 vessels, typically less than 150 ft. in length. Usually, steel hulled with drafts generally less than 12 ft. They have forward of after houses, (can include larger LCM's), and have adequate deck space for deployment/operation of VOSS systems, boom deployment/towing, and barge assist. They may have limited accommodation space. These vessels may be able to provide limited support services to other vessels in the fleet, i.e.: fuel, water, repair, etc. They are not restricted by seasonal or most sea ice constraints.
2a	Supply Boat, suitable for logistical support, ie. fuel, stores, water, equipment.
2b	Large LCM, Landing Craft, length: > 60 ft, suitable to transport vehicles, machinery and materials to shore.
3	Large Fishing Vessels Class 3 vessels are the larger of the fishing fleet, including large seiners, long liners, drift boats or tenders. They may have steel, aluminum or fiberglass hulls. Deck space is adequate for small skimming system deployment/operation. HP is generally over 400 allowing them to tow boom up to ocean size. These vessels have accommodations, but are usually limited to the vessel crew plus 1 or 2. They are not restricted by seasonal use, but will be restricted in sea ice concentration over 7/10ths.
3a	Large Fishing Vessel, Seiner, length: 41 ft. - 58 ft., draft: 3 ft. - 6 ft.
3b	Large Fishing Vessel, Long Liner, Tender, Drift Boat, Stern Pickers, length: 46 ft. - 90 ft., draft: 6 ft. - 12 ft.
3c	Medium LCM, Landing Craft, length: 36 ft. - 60 ft., draft: 3 ft. - 8 ft., suitable to transport small vehicles, equipment and materials to shore.

4	Small Fishing Vessels Class 4 vessels are smaller drift or seine boats with limited deck space and accommodations. The can be used for towing ocean boom in areas of lower current speed, but are well suited for towing inland or river boom. These vessels work best in nearshore areas with support from Class 1, 2 or 3 vessels. They are perfect for bays and protected waters. They are shallow draft vessels, made of aluminum or fiberglass and have no additional accommodations space. They may be limited by seasonal constraints and are not expected to work in sea ice concentrations over 5/10 ths.
4a	Small Fishing Vessel, Seiner, suitable for boom towing, length: 30 ft. - 40 ft., draft: 1 ft. - 4 ft.
4b	Small Fishing Vessel, Long Liner, Drift Boat, Stern Pickers, length: 30 ft. - 45 ft., draft: 1 ft. - 4 ft.
4c	Small Fishing Vessel, Bow Picker, length: 26 ft. - 34 ft., draft: 1 ft. - 3 ft.
4d	Small Fishing Vessel, Jet Drive, length: 24 ft. - 34 ft., draft: 1 ft. - 2 ft.
4e	Small LCM, Landing Craft, length: 20 ft. - 35 ft., draft: 1 ft. - 3 ft., suitable to transport materials to shore.
5	Large Skiff or Work Boat Small vessels with no accommodations. Day use vessels used for towing inland or river boom in nearshore areas or river mouths. May be used for scouting, wildlife hazing/capture, and miscellaneous assignments within various on-water task forces. These vessels may be limited by seasonal constraints. Unless, utilized close to a settlement, Class 5 vessel require support of a mother vessel.
5a	Jitney, Seine Skiff, Work Boat, suitable for towing, 80 hp.
5b	Jet Drive Work Boat, suitable for shallow water, 80 hp.
5c	Work Boat, Set Net Skiff, suitable for transporting materials, tending boom or miscellaneous assignments 80 hp.
6	Small Skiff or Work Boat Skiffs, open small boat type vessels, generally with outboard motors and no accommodations. Used to handle inland or river boom in nearshore areas or river mouths and other miscellaneous assignments within on-water task forces. Unless, utilized close to a settlement, Class 5 vessel require support of a mother vessel.
6a	Work Boat, Seine Skiff, suitable for towing, < 80 hp.
6b	Jet Drive Work Boat, suitable for shallow water, < 80 hp.
6c	Skiff, Work Boat, Set Net Skiff, suitable for transporting materials, tending boom or miscellaneous assignments < 80 hp.
6d	Inflatable, Fast Rescue Craft, any hp.

7	Passenger Vessel Crew Boat, charter-type vessels designed or licensed to carry passengers such as VIPs, media, or regulatory agency representatives. Generally day use. Can also be used to support safety staff, wildlife hazing/capture, and logistics support.
8	Tugs Inspected or un-inspected towing vessels, designed and equipped for towing large or small vessels.
9	Dive Vessel Designed or equipped to support diving operations.
10	Salvage Vessel Designed or equipped to support marine salvage operations.
11	Barges Tank barges or tank vessels designed and equipped to carry liquid cargoes.
11a	Large Skimming/Storage Barge, a large barge used as a skimming platform and recovered liquid storage. These barges exceed 10,000 bbls. of storage capacity and must be attended by a Class 1 or 8 vessels.
11b	Small Skimming/Storage Barge, a small barge used as a skimming platform and recovered liquid storage. These barges are less than 10,000 bbls. of storage capacity and cant be attended by a Class 1, 2, 3 or 8 vessels.
11c	Lightering Barge, used to store recovered liquids or lighter oil from a stricken vessel, but does not have skimming capability. Capacity exceeds 250 bbls. and are generally attended by Class 1, 2, 3 or 8 vessels depending on barge size.
11d	Mini Barge, Portable Barge, Pollutank, Dracone, are classified as equipment and are generally used as primary storage of recovered liquids. These devices are generally attended by Class 2 or 3 vessels.
12	Air Boats
12a	Large Air Boats, > 26 ft., twin engine, suitable to transport equipment and personnel in swallow water.
12b	Small Air Boats, < 25 ft., single engine, suitable to transport small equipment and personnel, may be used to set boom in inland areas.
13	Self-propelled Skimmers
13a	Large Self-propelled Skimmer, length: > 61 ft., suitable for open-water operations
13b	Medium Self-propelled Skimmer, length: 38 ft. - 60 ft., suitable for nearshore operations
13c	Small Self-propelled Skimmer, length: < 37 ft., suitable for harbor operations

Vessel Classification

(table taken from Geographic Response Strategy - Part Two General Protection/Recovery Tactics)

1	Class 1 vessels are large, deep draft, steel hull vessels generally longer than 150 ft. and over 1,500 HP. These vessels are capable of providing all offshore services required during a response, i.e.: major skimming systems, berthing, command vessel hauling cargo, etc. They generally have large open rear decks, elevated wheelhouses and are USCG inspected. They can be used in any offshore region of Alaska. These vessels may be able to provide limited support services to other vessels in the fleet, i.e.: berthing, meals, fuel, water, repair, etc. They are not restricted by seasonal or most sea ice constraints.
2	Class 2 vessels are slightly smaller than Class 1 vessels, typically less than 150 ft. in length. All are steel hulled with drafts generally less than 12 ft. They have forward or aft houses, (can include larger LCMs), and have adequate deck space for deployment/operation of VOSS systems, boom deployment/towing, and barge assist. They may have limited accommodation space. These vessels may be able to provide limited support services to other vessels in the fleet, i.e.: fuel, water, repair, etc. They are not restricted by seasonal or most sea ice constraints.
3	Class 3 vessels are the largest of the fishing fleet, including large seiners, longliners, gillnet boats and tenders. They may have steel, aluminum or fiberglass hulls. Deck space is adequate for small skimming system deployment/operation. HP is generally over 400, allowing them to tow boom up to ocean size. These vessels have accommodations, but are usually limited to the vessel crew plus 1 or 2. They are not restricted by seasonal use, but will be restricted in sea ice concentration over 70% ice cover.
4	Class 4 vessels are smaller fishing vessels, including seiners, longliners and gillnet boats. They have limited deck space and accommodations. They can be used for towing ocean boom in areas of lower current speed, but are well-suited for towing protected-water or calm-water boom. These vessels work best in nearshore areas with support from Class 1, 2 or 3 vessels. They are perfect for bays and protected waters. They are shallow draft vessels, made of aluminum or fiberglass and usually have no additional accommodations space. They may be limited by seasonal constraints and are not expected to work in sea ice concentrations over 50% ice cover.
5	Class 5 vessels are small, generally less than 30 ft., with no accommodations. These day-use vessels are used for placing and towing protected-water or calm-water boom in nearshore areas or river mouths. They may be used for scouting, wildlife hazing/capture, and miscellaneous assignments within various on-water task forces. These vessels may be limited by seasonal constraints.
6	Class 6 vessels are work boats or skiffs, open small boat type vessels, generally with outboard motors and no accommodations. They may be used to handle protected-water or calm-water boom in nearshore areas or river mouths and other miscellaneous assignments within on-water task forces. Class 6 vessels are generally not suited for transport/towing/working in exposed waters or handling long arrays of boom.
7	Class 7 vessels are passenger charter vessels designed and licensed to carry passengers such as supervisors, media, or regulatory agency representatives. They are generally for day use and can also be used to support safety staff, wildlife hazing/capture, and logistics support.
8	Class 8 vessels are inspected or uninspected towing vessels, designed and equipped for towing large or small vessels.
9	Class 9 vessels are dive vessels, designed or equipped to support diving operations.
10	Class 10 vessels are salvage vessels, designed or equipped to support marine salvage operations.
11	Class 11 vessels are tank barges or tank vessels designed and equipped to carry liquid cargoes.

Boom Classification Schemes

Classification of boom according to ASTM F1523 (World Catalog of Oil Spill Response Products)

Boom Property	Calm Water	Calm Water – Current	Protected Water	Open Water
Height, in.	6 to 24	8 to 24	18 to 42	36 to 90
Minimum Reserve Buoyancy to Weight Ratio	2:1	3:1	3:1	7:1
Minimum Total Tensile Strength, lbs.	1,500	5,000	5,000	10,000
Minimum Skirt Fabric Strength, lbs.in.	(2TM) 300 (1TM) 300	(2TM) 300 (1TM) 300	(2TM) 300 (1TM) 400	(2TM) 400 (1TM) 400
Minimum Skirt Tear Strength, lbs.	100	100	100	100

Classification of boom according to USCG VRP regulations.

Boom Property	River/Canal	Inland	Great Lakes	Ocean
Significant wave height, ft.	<1	<3	<4	<6
Height, in.	6 to 18	18 to 42	18 to 42	>42
Reserve Buoyancy to Weight Ratio	2:1	2:1	2:1	3:1 to 4:1
Total Tensile Strength, lbs.	4,500	15,000 to 20,000	15,000 to 20,000	>20,000
Skirt Fabric Tensile Strength, lbs.	200	300	300	500
Minimum Skirt Tear Strength, lbs.	100	100	100	125